Amendments to the Specification

At the indicated page and line number, please replace the existing paragraphs with the following paragraphs:

(Page 14, line 4)
Nogo-A gi:9408096 (CAB99248) (SEQ ID NO: 1)

(Page 14, line 28)
Nogo-B gi:9408098 (CAB99249) (SEQ ID NO: 2)

(Page 14, line 39)
Nogo-C gi:9408100 (CAB99250) (SEQ ID NO: 3)

(Page 14, line 47)
Caspr1 gi:4505463 (NP003623) (SEQ ID NO: 4)

(Page 15, line 20)
Nogo-66 (SEQ ID NO: 5)

(Page 43, line 20)
To raise polyclonal antibodies against Caspr, a 230bp fragment encoding the cytoplasmic region (amino acids 1308-1377) of human Caspr (Einheber et al, 1997) was amplified from human brain cDNA using primers 5'-AGTCGGATCCACAAAATC ATCGA/CTAT/CA/CAGGG-3' (SEQ ID NO: 6) (forward) and 5'-ACTCGAATTCAGACCTGGACT CCTCCTCCAA/GGATCTGG-3' (SEQ ID NO: 7) (reverse) with an added *BamH1* or *EcoR1* site, respectively. The amplified fragment was digested with *BamH1* and *EcoR1* and subcloned in-frame into pGEX-3C, and the sequence of the final construct was verified by DNA sequencing. The plasmid was transformed into *E. coli* BL21, and upon induction a Caspr-GST fusion protein of the expected size was recovered from bacterial lysates using glutathione-agarose beads. Caspr-GST was eluted from the beads using reduced glutathione, concentrated by lyophilization, and used to immunize rabbits.

The immune serum obtained from the rabbits was confirmed for its ability to recognize chick and mouse Caspr through immunoblotting and immunoprecipitation experiments.

(Page 46, line 27)

The Nogo-66 peptide (KLSDVLDDVLFLRRLEKITCNVHGLASNSYKQVLEES IAVESELYARFPHGEDSKQIAQIVGKYIR) (SEQ ID NO: 8) was purchased from Loke Diagnostics ApS (Denmark). To generate recombinant proteins of Nogo-66-GST and Nogo-N-terminal-GST (Nogo-N-GST), the encoding sequences for Nogo-66 and Nogo-N- terminus were amplified from human brain cDNA clone HK07722 (Nogo-A) using the primer sets below:

5'-CTGAATTCTTAGGATATACAAGGGTGT-3' (SEQ ID NO: 9) (forward)

5'-GCTAAGCTTTCACTTCAGAGAATCAACTA-3' (SEQ ID NO: 10) (reverse) for Nogo-66-GST

5'-AGGAATTCTAGATGAGACCCTTTTTGC-3' (SEQ ID NO: 11) (forward)

5'-CCCAAGCTTTCAATTAAAACTGTCTTTTGCTTT-3' (SEQ ID NO: 12) (reverse) for Nogo-N-GST. The PCR products were digested with EcoRI and HindIII and ligated into EcoRI/Hind III-digested pGEX-KG (Guan and Dixon, 1991). Then, these recombinant plasmids were transformed into E. coli Top 10 cells. GST fusion proteins were recovered from the bacterial lysates and purified using glutathione-agarose beads.

The cell adhesion assay was carried out as previously described (Xiao et al, 1996). Protein spots (1.5µl of 5 µM GST, Nogo-66-GST or 100 M Nogo-66) were applied onto nitrocellulose-coated surfaces of the Petri dishes (Becton Dickinson) and incubated for 2 hours at 37°C in a humidified atmosphere. The dishes were then incubated overnight with PBS containing 2% heat-inactivated fatty acid-free BSA (Sigma) to block residual non-specific protein binding sites. Mock-transfected CHO, F3-transfected or Caspr/F3 co-transfected CHO cells were then plated in 2 ml of chemically defined medium at a density of 2.5 X 10^5 cells/ml and incubated at 37°C in a humidified atmosphere. After 12 hours, cells were fixed by

flooding with PBS containing 2.5% glutaraldehyde. Cells adhering to the various spots were photographed and counted. All experiments were performed at least three times. Statistical analysis was carried out by Student-t test. The level of significance was chosen at $p < 0.05$.

(Page 60, line 32)
F3/Contactin gi:414791 (CAA79696) (SEQ ID NO: 13)

(Page 61, line 16)
NB3 gi:5631291 (BAA82612) (SEQ ID NO: 14)

(Page 61, line 38)
Notch1 gi:11275980 (AAG33848) (SEQ ID NO: 15)

(Page 62, line 28)
Notch2 gi:11275978 (AAA36377) (SEQ ID NO: 16)

(Page 122, line 13)
Polyclonal Caspr antibody was obtained by immunization of rabbits with a GST fusion protein of amino acids 277-430 of human Caspr and polyclonal MAG antibody (7610) by immunization of rabbits with the following peptide: N'-CISCGAPDKYESREVST-C' (SEQ ID NO: 17) (Eurogentec).

(Page 122, line 21)
Anti-NB-3 serum and monoclonal antibodies were generated against recombinant protein expressed in *E. coli* transformed with the pET15b vector (Novagen) containing rat NB-3 cDNA encoding Ig domains I-II (amino acids 30-227). To construct this expression vector, two oligonucleotide primers were used in PCR reactions to amplify cDNA encoding the corresponding region from a cDNA library synthesized from rat brain total RNA. The two oligonucleotide primers are:

5'-TCCGGATCCCATCAGCCAAGGATGTCATTTT-3' (SEQ ID NO: 18)
(forward)
5'-TCCGGATCCGTCGACTGGCACATATTCCCCCATGA-3' (SEQ ID NO: 19)
(reverse)

(Page 127, line 20)

N1.1 forward :5'-GGTGGAATTCTAATGCCACGGCTCCTG-3' (SEQ ID NO: 20)
reverse :5'-TTGAAGTTCCTCATCCGTGTTGATTT-3' (SEQ ID NO:21)
N1.2 forward :5'-TGTGGAATTCTATGTGATCTGGGTGCC-3'(SEQ ID NO: 22)
reverse :5'-CGTCAAGTTCGTCATCGATGTCACTCT-3'(SEQ ID NO:23)
N1.3 forward :5'-CTTGGAATTCTATGTGCTACCAGCCCC-3' (SEQ ID NO: 24)
reverse :5'-TTGAAGCTTGCCATTGATGACTGACT-3'(SEQ ID NO: 25)
N1.4 forward :5'-ACTGGAATTCTATGCCATCCCCCCCTT-3'(SEQ ID NO: 26)
reverse :5'-AAGGAAGCTTCTGCGAGGGCAGCGGAG-3'(SEQ ID NO:27)

(Page 132, line 12)

Myelin Associated Glycoprotein (MAG)
Forward Primer : 5'-ATCCTGGCCACGGTCATC-3'(SEQ ID NO: 28)
Reverse Promer : 5'-CACACCAGTACTCCCCATCGT-3'(SEQ ID NO:29)
Taqman Probe : 5'-CAGCTGGAACTCCCTGCAGTGACG-3'(SEQ ID NO:30)

(Page 132, line 17)

Proteolipid Protein (PLP)
Forward Primer : 5'-AGGCCAACATCAAGCTCATTCT-3'(SEQ ID NO: 31)
Reverse Primer : 5'-CGGGATGTCCTAGCCATTTTC-3'(SEQ ID NO: 32)
Taqman Probe : 5'-CCAAACAATGACACACCCGCTCCA-3'(SEQ ID NO:33)